

A new (hot) method of collecting stick insects in Australia.

Lyn Lowe & Paul Brock.

Lyn Lowe, CSIRO, Tropical Ecosystems Research Centre, Division of Wildlife and Ecology, PMB 44, Winnellie, Darwin, N.T. 0821, Australia.

Paul Brock, "Papillon", 40, Thorndike Road, Slough, SL2 1SR, U.K.

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Various techniques may be used to locate and collect stick insects in the wild, and to some extent this depends on knowledge of the species of foodplants. It is generally easy to locate stick insects on, or near their foodplants during the day in Europe. This is also possible in Australia. A joint paper on stick insects collected during the day in Kakadu National Park, Northern Territory, Australia, is in progress.

In Peninsular Malaysia, Singapore, and many other tropical countries, finding stick insects in the daytime is uncommon, but they are easily observed by torchlight at night, when they are active. However, collectors such as Michael Yeh (Ipoh, Malaysia), are successful in locating mainly winged species by knocking them from the tree tops, using a net with an extended handle (for further details see Brock, 1992).

Langlois and Lelong (1992) reported blowing air or cigarette smoke over insects, or using a fine humidifying spray in suitable habitats, to reveal the whereabouts of well concealed stick insects. This method was used for all three species found in France.

A new method is reported here.

On the afternoon of 26th May 1994, Graham Brown (Museum and Art Gallery of the Northern Territory, Darwin, Australia) and the authors were collecting in Litchfield National Park, Northern Territory. Graham very kindly arranged the 4WD vehicle and chauffeured the party around. The second author was specifically looking for twig like, grass feeding stick insects known to occur in the area. He, his mother and sister had failed to find a single specimen, despite hours spent in a thorough examination of the vegetation. While returning to Darwin, the first author suggested a search ahead of a scrub fire may be rewarding. Approximately 15km southwest of the Territory Wildlife Park, Berry Springs (which displays a few live grass feeding stick insects), on the gravel section of Wagait Road, just such a roadside fire awaited the party.

The smoke was spreading rapidly through ground cover and mid level vegetation, and numerous insects were moving ahead of the fire front, towards the entomologists. Within minutes it was hotting up and numerous grass feeding stick insect nymphs were walking rapidly towards the road nearby to escape the fire. All individuals collected were of the same species, belonging to the subfamily Lonchodinae, probably of the genus *Hyrtacus*, and common in the Northern Territory.

In addition to stick insects, other insects, winged and brachypterous, were rapidly making their escape. The first author, who has previously used this technique for collecting, found several interesting species of tettigoniid.

To avoid the rapidly approaching flames, the entomologists made a hasty retreat. A photograph of the authors searching for insects, and Graham Brown facing the camera in his "Exterminate" T-shirt, was published in *Myrmecia* (anon, 1994), prompting the editor of the news bulletin to comment that Graham's T-shirt "explained the technique".

Bush fires are a frequent occurrence in many parts of Australia, especially in the monsoonal tropics of northern Australia. Many local volunteer fire brigades burn off dense vegetation, following heavy growth in the wet season, along property boundaries and roadsides to prevent or reduce damage to people and property by uncontrolled fires during the dry season. Other fires may be the result of lighted cigarettes thrown from passing cars.

References

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